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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,775	10/26/2000	Paul G. Milazzo	WMI-004CN4 (8415/5)	5306

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EXAMINER	
KOENIG, ANDREW Y	

ART UNIT	PAPER NUMBER
2611	

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15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/697,775	Applicant(s) MILAZZO ET AL.	
	Examiner Andrew Y Koenig	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 April 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *52-110* is/are pending in the application.

4a) Of the above claim(s) *84-94 and 100-110* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *52-83, 95-99* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11, 12, 14*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 52-110 have been considered but are moot in view of the new ground(s) of rejection.

2. The applicant argues that the placement zones and trigger zones of Kasier are merely temporal portions of a video signal and do not correspond to an "annotation data structure element." The examiner disagrees; an annotation data structure element is given the broadest reasonable interpretation in the art of: a data structure element providing additional information. Therefore, a temporal position is not precluded by the given definition of an annotation data structure element.

Election/Restrictions

3. Newly submitted claims 84-94 and 100-110 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Newly submitted claims 84-94 and 100-110 introduce limitation directed to the encoding the packets with transmission techniques employed which is separate and distinct from the data structure per se.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 84-94 and 100-110 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 52, 66, and 95 are rejected under 35 U.S.C. 101 because there is not enough functional interrelationship to qualify as a proper data structure.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims ??? are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,615,408 to Kaiser et al. in view of U.S. Patent 5,889,746 to Moriyama et al.

Regarding claims 52 and 66, Kaiser teaches placement zones (as shown in figure 2), which has a reference to an object in the video frame (Abstract), which equates to a first annotation data structure element that includes and object reference to an object in the video frame. Kaiser teaches a trigger zone which contains a Uniform Resource Identifier (URI), which equates to a second annotation data structure element referenced by the first identifier and including a set of data references (col. 6, ll. 34-39). Kaiser teaches the URI being identified by the object in that the URI has a

"<videoprod>" field which is not temporally unique into which the trigger is embedded (col. 6, ll. 43-64. However, Kaiser is silent on the first annotation element identifying the second element as claimed. Moriyama teaches identifying elements via pointers, as shown in figure 9. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by identifying a second element via a pointer as taught by Moriyama in order to efficiently manage dynamic resources. Further, Kaiser discloses that the image area (described using a placement zone) is referenced by some form of an identifier in order to link actions to the image (col. 10, ll. 1-8).

Regarding claims 53 and 67, Kaiser teaches placing the placement zones in the video stream (fig. 2), which reads on a timing data indicator associated with the at least on of said plurality of data structure elements.

Regarding claims 55 and 69, Kaiser teaches placing the placement zones in the video stream (fig. 2), which indicates an activation time.

Regarding claims 56 and 70, Kaiser teaches the placement zones associated with a set of video frames (fig. 2, col. 6, ll. 18-33), further the trigger is associated with the placement zones and consequently is associated with the video program, given the broadest reasonable interpretation of associated.

Regarding claims 57 and 71, Kaiser is silent on the elements being transmitted separately. Official Notice is taken separately sending data in MPEG is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by sending the elements separately in

order to send data that is larger than the data packets thereby using the existing infrastructure to transmit packets.

Regarding claims 58 and 72, Kaiser teaches a trigger which is used to display the action being performed fig. 6A-6b, which reads on the first set of annotation references including a data field. However, Kaiser is silent on a second identifier referencing a third annotation data structure element. Official Notice is taken that the use of pointers is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser to implement a pointers (which reads on a reference) in order to access another portion of a data structure thereby providing a system that efficiently manages variable length data structures and increasing the robustness of the system.

Regarding claims 59 and 73, Kaiser is silent on the annotation data field is a title data field and the third data structure element is a string including the title of the object. Moriyama teaches a pointer to a text string wherein the text string can be the title (col. 15-16, ll. 65-31; see also fig. 9). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by pointing to a string including the title as taught by Moriyama in order to efficiently manage variable length fields and manage the memory of the system.

Regarding claims 61, 62, 75, and 76, Kaiser is silent on a variable parameter field and a variable value. Official Notice is taken that a variable parameter field and variable values are well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by using a

variable parameter field and variable values in order to efficiently manage the memory by dynamically referencing and allocating the memory.

Regarding claims 63 and 77, Kaiser is silent on never duplicating the first and second identifiers. Official Notice is taken that never duplicating identifiers is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by never duplicating identifiers in order to appropriately reference the appropriate information thereby eliminating access to the incorrect data structure.

Regarding claims 64 and 78, Kaiser teaches location and shape information, which equates to a fifth data structure element (fig. 6B, col. 6, ll. 20-41).

Regarding claims 65 and 79, Kaiser teaches that the fifth data structure is associated with a video frame (see fig. 2).

Regarding claims 80 and 96, Kaiser teaches a visual highlight of an image as an overlay (see fig. 6B, label 6500, col. 10, ll. 20-41), which is in the form of an HTML table, which equates to a third data structure storing image overlay data, but is silent on displaying in response to a user command. Official Notice is taken that customizing interfaces based on user preferences is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by customizing the interfaces in order to control the highlighted portions of Kaiser thereby enabling the user to further customize their viewing environment.

Regarding claims 81 and 97, Kaiser teaches the image overlay data is associated with time data and synchronized to the video frames (col. 10, ll. 20-41).

Regarding claims 82 and 98, Kaiser teaches identifying the object (col. 10, ll. 20-41, fig. 6B), but Kaiser is silent on determining the difference from the a first time and the current time to initiate the event. Official Notice is taken that determining the difference in time to perform an event is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by determining the difference in time to perform an event in order to efficiently manage events thereby reducing the processing of the system by selectively querying the system clock.

Regarding claim 95, Kaiser teaches a video production (1100), which reads on a first processor for creating the data structures, such as a DVD (col. 5, ll. 1-7). Kaiser teaches placement zones (as shown in figure 2), which has a reference to an object in the video frame (Abstract), which equates to a first annotation data structure element that includes and object reference to an object in the video frame. Kaiser teaches a visual highlight of an image as an overlay (see fig. 6B, label 6500, col. 10, ll. 20-41), which is in the form of an HTML table, which equates to a third data structure, which reads on the third data structure. Kaiser teaches a trigger zone which contains a Uniform Resource Identifier (URI), which equates to a second annotation data structure element referenced by the first identifier and including a set of data references (col. 6, ll. 34-39). Kaiser teaches the URI being identified by the object in that the URI has a "<videoprod>" field which is not temporally unique into which the trigger is embedded (col. 6, ll. 43-64. However, Kaiser is silent on the first annotation element identifying the second element and third element as claimed. Moriyama teaches identifying elements

via pointers, as shown in figure 9. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by identifying a second and third element via a pointer as taught by Moriyama in order to efficiently manage dynamic resources. Further, Kaiser discloses that the image area (described using a placement zone) is referenced by some form of an identifier in order to link actions to the image (col. 10, ll. 1-8). Kaiser teaches the image overlay data is associated with time data and synchronized to the video frames (col. 10, ll. 20-41).

8. Claims 54, 68, 83, and 99 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,615,408 to Kaiser et al. in view of U.S. Patent 6,415,438 to Blackketter et al.

Regarding claims 54 and 68, Kaiser is silent on indicating an expiration time. Blackketter teaches expiring triggers (col. 3, ll. 13-22, col. 10, ll. 24-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by indicating an expiration time in order to ignore invalid triggers (Blackketter: col. 10, ll. 24-35).

Regarding claims 83 and 99, Kaiser is silent on indicating an expiration time. Blackketter teaches expiring triggers, which are indicative of the last instance the data structure is used (col. 3, ll. 13-22, col. 10, ll. 24-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by indicating an expiration time in order to ignore invalid triggers (Blackketter: col. 10, ll. 24-35). Kaiser and Blacketter are silent on removing the data structures.

Official Notice is taken that removing expired information is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser and Blacketter by removing the data structures in order to conserve memory and efficiently manage the memory resources.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y Koenig whose telephone number is (703) 306-0399. The examiner can normally be reached on M-Th (7:30 - 6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ayk

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PRIMARY EXAMINER